

C. Remarks

The claims at issue are 1, 2, 4, 5, 9, 11-14, 19-48, 50, 53, 54 and 61-63, with claims 1, 24, 34, 53, 54 and 63 being independent. Claims 24-47, 53 and 54 have been withdrawn from consideration by the Examiner as being directed to non-elected inventions. Claims 1 and 63 have been amended to better define the presently claimed invention. Support for this amendment may be found throughout the specification, the drawings and the claims. Claims 5, 9, 50 and 61 have been amended for clarification and to improve their form. No new matter has been added. Reconsideration of the present claims is expressly requested.

Claims 9, 50 and 61 are objected to because of minor informalities. Applicants have amended these claims to resolve the informalities and respectfully request withdrawal of this objection.

Claims 4 and 5 stand rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite. This rejection is respectfully traversed.

With respect to claim 4, Applicants submit that the meaning of the phrase “the polymer is aligned in a direction, which is different from an alignment direction of the tubular pores” is sufficiently clear. Specifically, the pores and the polymer are not aligned in the same direction if projected onto the same plane.

With respect to claim 5, Applicants respectfully submit that the substantially orthogonal alignment is sufficiently clearly described, for example, in paragraph [0014] of the substitute specification, and is shown in the drawings. However, for clarification, Applicants have amended claim 5 to indicate that the two recited directions are substantially orthogonal to each other.

Claims 1, 4, 5, 9, 11-14, 20-22, 48, 50 and 61-63 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by U.S. Patent No. 6,177,181 (Hamada). The grounds of rejection are respectfully traversed.


Prior to addressing the grounds of rejection, Applicants would like to briefly review some of the features of the presently claimed invention. The presently claimed invention is directed to a structure in which tubular pores are arranged uniaxially on a substrate. These tubular pores extend along a boundary surface between the portion containing the pores and the substrate.

Hamada is directed to porous films and a process for their production. In particular, Hamada discloses a porous polymer membrane. However, the pores in Hamada are shown to be almost vertical to the boundary region, and there is no disclosure or suggestion regarding pore orientation control (see, e.g., Fig. 1). At most, Hamada states that "[t]he configuration of the pores formed among particles [is] generally indefinite or amorphous, irregular and non-circular or non-spherical" (col. 4, lines 9-11). There is no disclosure or suggestion that the pores extend along the boundary surface between a portion containing the pores and the substrate. Clearly, Hamada cannot affect the patentability of the presently claimed invention.

Wherefore, Applicants respectfully request that the outstanding objection and rejections be withdrawn and the present case be passed to issue.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



Attorney for Applicants
Registration No. 48,512

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200